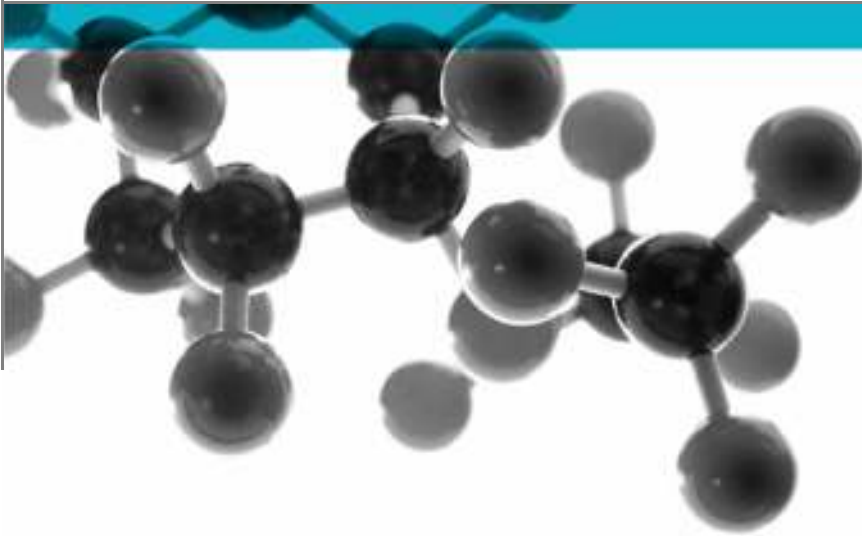




# STS202

Issue 7: April 2016



Test of: GypWall QUIET IWL

**Burglary resistance requirements for construction products including doorsets, windows, curtain walling, security grilles, garage doors and roller shutters.**

A Report To:  
British Gypsum  
East Leake, Loughborough, Leicestershire. LE12 6HX

Document Reference:  
WIL 400604

Date: 06/09/2018

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Issue No.: 1

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Testing  
Advising  
Assuring

## TEST CONCLUSIONS

Samples of:  
Manufacturer            British Gypsum  
Product                    Wall  
Model                      GypWall QUIET IWL

have been tested in accordance with: STS 202 Issue 7: April 2016.  
By Exova Willenhall, a UKAS accredited Testing Laboratory (No. 0621)

At Unit 3 Wednesbury One, Black Country New Road, Wednesbury, WS10 7NZ.  
Results and comments as detailed below:

<b>Clause No.</b>	<b>Description</b>	<b>Compliance</b>
5	Resistance Class – BR1	<b>YES</b>
6	Test requirements and procedures	<b>YES</b>
9	Requirements for hardware	<b>N/A</b>
11	Labelling and Conformity	<b>N/T</b>
12	Installation instructions	<b>N/T</b>

Testing carried out outside the scope of UKAS approval  
No inferences can be made regarding performance against other requirements of this standard

Tests marked “ N/A ” are not applicable to the sample under test.  
Tests marked “N/T” were not applied to the sample under test

## AUTHORISATION

Tests performed by: Brett Devey, Trainee Test Engineer  
Josh Ratcliffe, Trainee Test Engineer

Report issued by: Chris Bryan, Senior Test Engineer




Signed

Date 5<sup>th</sup> September 2018

For and on behalf of Exova (UK) Ltd

Report authorised by: Mark West, Door & Window Laboratory Manager



Signed

Date 5<sup>th</sup> September 2018

For and on behalf of Exova (UK) Ltd

Report issued: 06 September 2018

### NOTE.

These tests are not covered by the Laboratory UKAS accreditation schedule.

Tests marked NT were not tested

Tests marked NA are not applicable to the product on test.

The laboratory has tested the product supplied by the client as sampled in accordance with their own requirements

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Author: M West  
Client: British Gypsum

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## TEST DETAILS

### CLIENT DETAILS

Company name British Gypsum  
Address East Leake  
Loughborough  
Leicestershire  
LE12 6HX

Contact Paul French

### ORDER DETAILS

Order number 4501763194  
Dated 07/06/18

### SAMPLE DETAILS

Wall Dimensions 2396 x 1995 x 225mm  
Material/  
configuration Plasterboard. 15mm Gyproc SoundBloc F outer layer, 12.5mm Habito Gyproc inner layer (each side) twin Gypframe 60 I 50 studs @600mm centres. 50mm Isover Acoustic partition Roll (APRI1200) insulation.  
Studs Fixings 300 c/s (Inner layer 25mm British Gypsum High Performance Screws, Outer layer 40mm British Gypsum Drywall Screws)  
Joints 4 joints, with Gyproc joint tape and Gyproc Easi-Fill 45

### TEST DETAILS

Test specification STS 202 Issue 7: April 2016  
Full test Yes  
Test to clauses All

Sample received 04/06/2018  
Test started 05/06/2018  
Test completed 05/06/2018

Special Test requirements  
Other reports to be used in conjunction with this report

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## TEST PROCEDURE

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<b>Introduction</b>	<p>This test report should be read in conjunction with the technical schedule STS 202 Issue 7: April 2016 Burglary resistance requirements for construction products including doorsets, windows, curtain walling, security grilles, garage doors and roller shutters.</p> <p>The specimens were judged on their ability to comply with the performance criteria as required in STS202.</p>
<b>Instruction To Test</b>	<p>Initial requirement was for a burglar resistance level BR1.</p>
<b>Test Specimen Construction</b>	<p>A description of the test construction is given in the Schedule of Components. The description is based on a detailed survey of the specimens and information supplied by the sponsor of the test.</p>
<b>Installation</b>	<p>The sample was supplied mounted within a timber sub-frame of nominal section fitted flush with the exterior face, in accordance with the clients fitting instructions.</p> <p>Mr Paul French, a representative of British Gypsum witnessed the test.</p>
<b>Sampling</b>	<p>The samples were not independently witnessed or selected and were provided direct from the test sponsor.</p>
<b>Test Climate</b>	<p>The sample was conditioned in the laboratory in the range 15-30°C and 25-75% humidity.</p> <p>The temperature and humidity in the lab was maintained in the range 22.3-26.1°C and 44-44.5% humidity for the duration of the test.</p>

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## INITIAL OBSERVATIONS

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**The internal face  
of the sample**

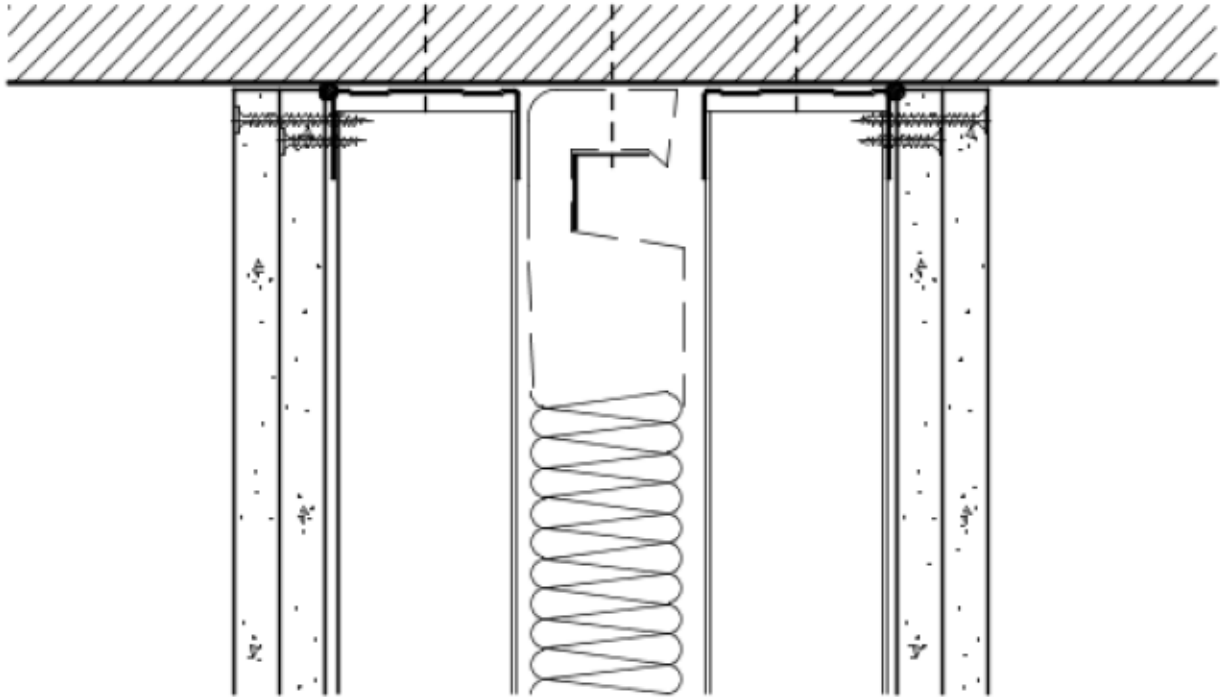


**The external face  
of the sample**



## TEST SPECIMEN

Figure 1- Vertical section



Do not scale. All dimensions are in mm

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## SCHEDULE OF COMPONENTS

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(Refer to Figures 1 to 3)  
 (All values are nominal unless stated otherwise)  
 (All other details are as stated by the sponsor)

### Variants

None

<u>Item</u>	<u>Description</u>
Gypframe 60 I 50 I Stud	: Metal frame "I" studs installed vertically at 600mm centres in twin rows to provide framing
Gypframe 62 FEC 50 Channel	: Metal channel fixed to create top and bottom of opening framework
12.5mm Gyproc Habito	: Plasterboard installed as inner layer to both sides of the partition
15mm Gyproc SoundBloc F	: Plasterboard installed as outer layer to both sides of the partition
25mm British Gypsum High Performance	: Used to fix Gyproc Habito to Gypframe framing screws
40mm British Gypsum Drywall Screws	: Used to fix Gyproc SoundBloc F to Gypframe framing through Gyproc Habito inner layer
50mm Isover Acoustic Partition Roll (APR1200)	: Glass mineral wool insulation roll installed with Gypframe framing
Gyproc Sealant	: Silicone-based sealant installed around the framing perimeter for acoustic performance

## PERFORMANCE CRITERIA & TEST RESULTS

Clause	Requirement	Result	Pass/fail
<b>4. General Requirements</b>			
4.1	The client shall supply detailed information about the product to be tested.	Information supplied by the client prior to testing.	<b>Pass</b>
4.2	The size and range of products shall be agreed in advance.	Product range and sized agreed by the client.	<b>Pass</b>
4.3	The test samples shall be fully functioning, and be fitted to the subframe in accordance with the manufacturers installation instructions.	Samples fully functioning and fitted in accordance with manufacturers installation instructions.	<b>Pass</b>
4.4	The attack face and required burglar resistance rating shall be agreed with the client.	Attack face was defined as the external face. Initial requirement was for a rating of BR1.	<b>Pass</b>
4.5	An agreed number of samples shall be supplied.	1no. test samples supplied.	<b>Pass</b>
6.6	The sample shall be checked for damage prior to testing and any damage recorded.	Sample undamaged prior to testing.	<b>Pass</b>
	The sample shall be closed and locked, and tested in the most secure position.	Not applicable, none locking product	<b>N/A</b>
<b>6.7 Pre test</b>	Every conceivable combination of tool and attack method shall be used to identify the most productive method of attack for the sample.		
<b>BR1 Tool kit 1 Resistance time 1 min</b>	Attacks where made using a knife to try stab through the wall. Total attack time was 1 minute. Entry not achieved.		<b>PASS BR1</b>
	Attacks where made using a knife to stab through the wall creating a hole big enough to get the nail bar in. Once the hole was created the nail bar was used to try and lever away the outer layer of wall. Total attack time was 1 minute. Entry not achieved.		
	Attacks where made using a knife to try and stab through the joint in the hope of exposing a weakness in the inner structure of the wall. Total attack time was 1 minute. Entry not achieved.		
	Attacks were made using the nail bar to try and stab through the wall and tear away the outer layer of wall. Total attack time was 1 minute. Entry not		

Clause	Requirement	Result	Pass/fail
	<p>achieved.</p> <p>Attacks were made by kicking the wall. Considerable damage was made to the wall. The first layer had been kicked through and the second skin cracked but not enough for the failure criteria to pass freely according to the standard. Total attack time was 1 minute. Entry not achieved.</p> <p>Attacks were made by shoulder barging the wall in the hope that the wall would flex and allow entry to be gained. Total attack time was 24 seconds. Entry not achieved.</p>		
<b>6.10 Main test</b>	The burglar resistance attack method used by the test team during the main test shall be the one most likely to gain entry in their opinion, as determined during the pre-test.		
<b>BR 1 Tool kit TK1 Resistance time 1 min</b>	Main test not carried due to no vulnerability being identified.		<b>N/T</b>
<b>9 Requirements for hardware</b>	Any locking cylinders should meet the requirements of a one star rating to TS007, including the general vulnerability of the cylinder, if applicable.	Not applicable, no cylinder fitted.	<b>N/A</b>
<b>11 Labelling and Conformity</b>	The product should be fitted with a tamper evident identification label.	Not assessed.	<b>N/T</b>
<b>12 Installation instructions</b>	The product shall be supplied with full installation instructions.	Not assessed.	<b>N/T</b>

## CONCLUSIONS

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**Evaluation against objective** The sample as provided by the client was subjected to burglar resistance testing in accordance with STS 202: Issue 7: April 2016 and achieved the requirements for a burglar resistance level of BR1.

**Observations & comments**

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## LIMITATIONS

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**Limitations** The results relate only to the behaviour of the specimens of the element of construction under the particular conditions of test. They are not intended to be the sole criteria for assessing the potential performance of the element in use, nor do they reflect the actual behaviour in use.

**Range of assemblies covered by this report** It is our opinion that the range of assemblies covered by this report are limited to the following

- Assemblies with thickness and configurations of at least those specified such that the overall partition depth to the outside of the external face is no less than 200mm.
- Wall assemblies formed with stud centres of not more than 600mm and all vertical board joints located to coincide with a metal stud position.

**Uncertainty of Measurement** The uncertainties of measurements calculated for a confidence level of 95% throughout these tests are within the limits of these tolerances.

The standard specifies the following tolerances

- Forces:  $\pm 2\%$
  - Distances:  $\pm 1\text{mm}$  for tape measures  $\pm 0.01\text{mm}$  for dial gauges
  - Times:  $\pm 5\text{s}$
-

## REVISION HISTORY

This issue of the report replaces all previous issues that are now withdrawn.

<b>Issue No :</b>	<b>Re - Issue Date :</b>
<b>Revised By:</b>	<b>Approved By:</b>
<b>Reason for Revision:</b>	

**END OF REPORT**